

U.S. Antarctic Marine Living Resources Program
2008-2009 Weekly Field Reports
Cape Shirreff, Livingston Island

Volume 8
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Seabirds:

1. We determined 14 December to be the mean gentoo penguin hatch date. To date, 64% of the gentoo penguin reproduction study nests have hatched, 28% continue to incubate eggs, and 8% have failed. In the three weeks since chinstrap penguin clutch initiation, 91% of the chinstrap penguin reproduction nests continue to incubate eggs and 9% have failed.
2. We continue to monitor known age penguins that were banded here as chicks. Of the 35 known aged gentoo penguins that have nested 56% have hatched, 21% continue to incubate eggs and 24% have failed. Forty known aged chinstrap penguins have nested. Of these, 80% are incubating eggs and 20% nests have failed.
3. Seventeen of the brown skua pairs we monitor have initiated nests, and two have failed.
4. The first kelp gull chick was observed on December 14. To date, 40 kelp gull pairs have initiated nests.



Pinnipeds:

5. We completed fur seal perinatal female captures on Saturday, 13 December.



There were 32 captures; 30 of these received VHF radio transmitters for monitoring of attendance behavior and trip duration (CCAMLR Ecosystem Monitoring Program protocol). Nine females also received a time depth recorder for monitoring diving effort for the first six trips to sea. Mean time captive was 28 min (range: 11-43 min) and mean time on gas anesthesia was 17 min (range: 9-30 min). The mean time to reunion with their pups after release was less than 1 min (range: 0-4 min). Captures began on 4 December and, as of yesterday, 10 females have departed for their first trip to sea. Four have completed their first trip and one has departed on her second trip.

6. We are monitoring pup growth of our CCAMLR attendance females and have gotten a post-perinatal mass on six of the pups whose mothers have departed sea.
7. At the last census of fur seal study beaches on 13 December we recorded a total of 1031 adult females and 1443 pups (1409 live and 34 dead). We estimate that the median date of pupping this year is 5 December. This is the earliest median date of pupping we have recorded at Cape Shirreff since the US-AMLR monitoring program began in 1997/98.
8. Thus far 78.8% (167/212) of our tagged female population have returned to Cape Shirreff. The natality rate for returned females so far is 84.4%. There are, however, females still arriving and pupping, and we expect over-winter survival and natality rate to increase.
9. To date we have seen 71 fur seals that were tagged as pups in previous years (38.0% of these have been 9-year-olds from the 1999/00 cohort). Fifteen new known-aged seals have returned since last



week. Forty-six (64.8%) of these have been females. No yearlings have been seen yet.

10. We recorded the arrival of three leopard seals this week. All were tagged in past years at Cape Shirreff. This is a few days earlier than the first sighting last year and generally earlier than in years past. It will be interesting to monitor their presence and absence, as fur seal pups have not begun entering the water.

Weather:

11. As last week, this week has had above average winds. Mean wind speed was 19.1 mph with maximum wind gust of 55 mph. Winds were predominantly from the west or south all week. The mean temperature for the week (0.7C) was cooler than last week (1.1C). The high temperature for the week was 3.2C and the low was -2.6C. Total precipitation this week was 0.24 inches. Sunrise and sunset are now 02:56 and 22:59. Mean daily solar radiation this week was 17,417 watts per sq. meter indicating more sun this week compared to last week.

Camp:

12. We postponed putting up our little Cape Shirreff Christmas tree and decorating the hut until completion of fur seal perinatal captures. We finished the last captures on Saturday afternoon and decorated the hut for Christmas on Sunday. We dug out the presents from storage boxes that were sent by friends and family at opening of our camp and have put them around the tree.



13. We continue to see feeding humpback whales in front of our camp.

Submitted by AMLR staff currently residing at the Cape Shirreff field station, Livingston Island.

